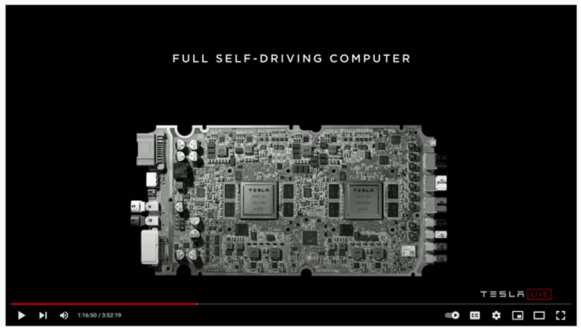
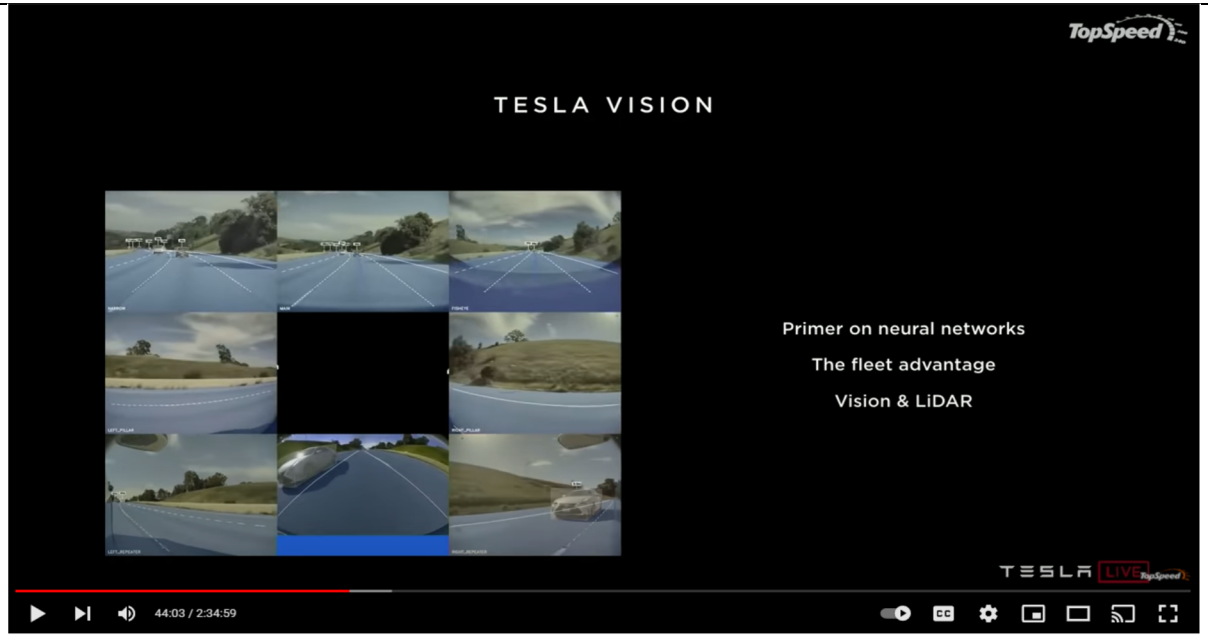
EXHIBIT L

U.S. Patent No. 11,055,583	
Claim 4	**Exemplary Infringement Evidence[1]**
[1pre] A system comprising:	To the extent the preamble is limiting, each autonomous Tesla vehicle with Software Version 9.0 and beyond (this includes vehicles with enhanced autopilot and/or full self-driving (FSD)) alone or together with the Dojo super computer meet the limitations of the claimed system. As a driver drives a Tesla vehicle, the vehicle learns digital pictures depicting the vehicle's surrounding (i.e. pedestrians, other vehicles, roads, buildings, etc.) as well as driving instructions (i.e. instructions for effecting speed, steering, breaking, trajectory, etc.) that the driver used to navigate that surrounding. This driving knowledge learned on one Tesla vehicle is then distributed to all vehicles in Tesla fleet via over-the-air (OTA) software updates. The fleet, therefore, enables each vehicle in the fleet to autonomously implement driving instructions learned on one or more originating vehicles when digital pictures of a similar surrounding are captured by any of the vehicles in Tesla fleet, thereby enabling their autonomous driving. The discussion and evidence cited in claims [1a-d] are incorporated herein.
[1a] one or more processors; and one or more non-transitory machine readable media storing machine readable code that, when executed by the one or more processors, causes the one or more processors to perform at least:	Each of the accused Tesla vehicles (Models 3, S, X, Y, etc.) includes one or more processors (e.g., the full self-driving chip) programmed by code stored on one or more non-transitory machine readable media (i.e. RAM memory, SSD drive, flash memory, hard drive, etc.) all part of Tesla full self-driving computer.   *See* Tesla Autonomy Day 2019 video https://www.youtube.com/watch?v=-b041NXGPZ8 at 7:11 (Tesla

[1] These infringement contentions are prepared with publicly available information.

	full self driving computer) and at 10:22 (Tesla full self driving chip). **How does Autopilot work?** As of mid-February 2022, all vehicles built for the North American market will feature Tesla Vision, which uses eight cameras and powerful neural net processing to see the environment around the car and deliver Autopilot features. This camera suite provides occupants with an awareness of their surroundings that a driver alone would not otherwise have. A powerful onboard computer processes these inputs in a matter of milliseconds to help make driving safer and less stressful. *See* https://www.tesla.com/support/autopilot
[1b] receiving or generating a first one or more digital pictures, wherein the first one or more digital pictures depict at least a portion of a first device's surrounding;	Each autonomous Tesla vehicle is an example of a system including one or more processors that receiving or generating a first one or more digital pictures, wherein the first one or more digital pictures depict at least a portion of a first device's surrounding. For example, as a driver drives a first Tesla vehicle **(the claimed "first device")**, the processor of the first Tesla vehicle receives from the vehicle's cameras the **first one or more digital pictures** depicting the vehicle's surrounding (i.e. pedestrians, other vehicles, roads, buildings, etc.).

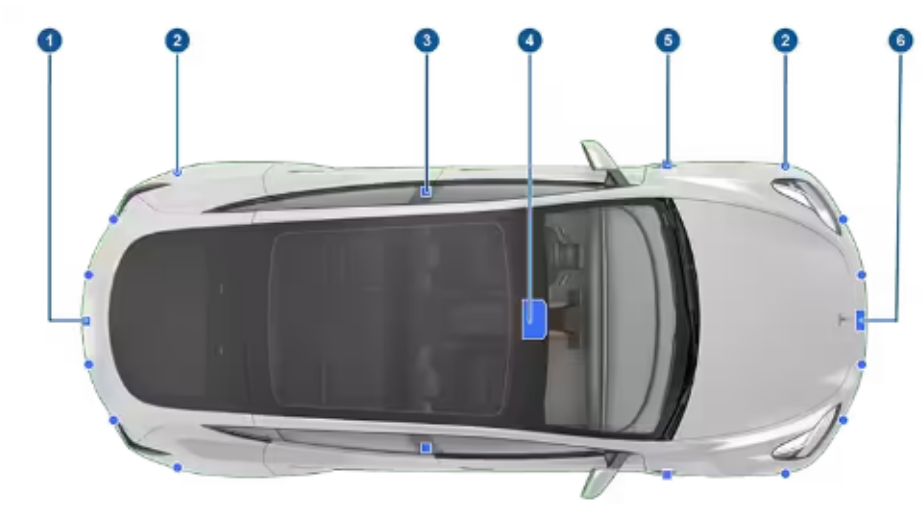


See Tesla Autonomy Day 2019 video https://www.youtube.com/watch?v=-b041NXGPZ8 at 44:00 (a stream of videos from eight cameras across the vehicle used to make a lane change).

Further, the Model Y (an accused vehicle) has multiple cameras to depict a portion of the vehicle's surrounding.

How It Works

Your Model Y includes the following components that actively monitor the surrounding area:



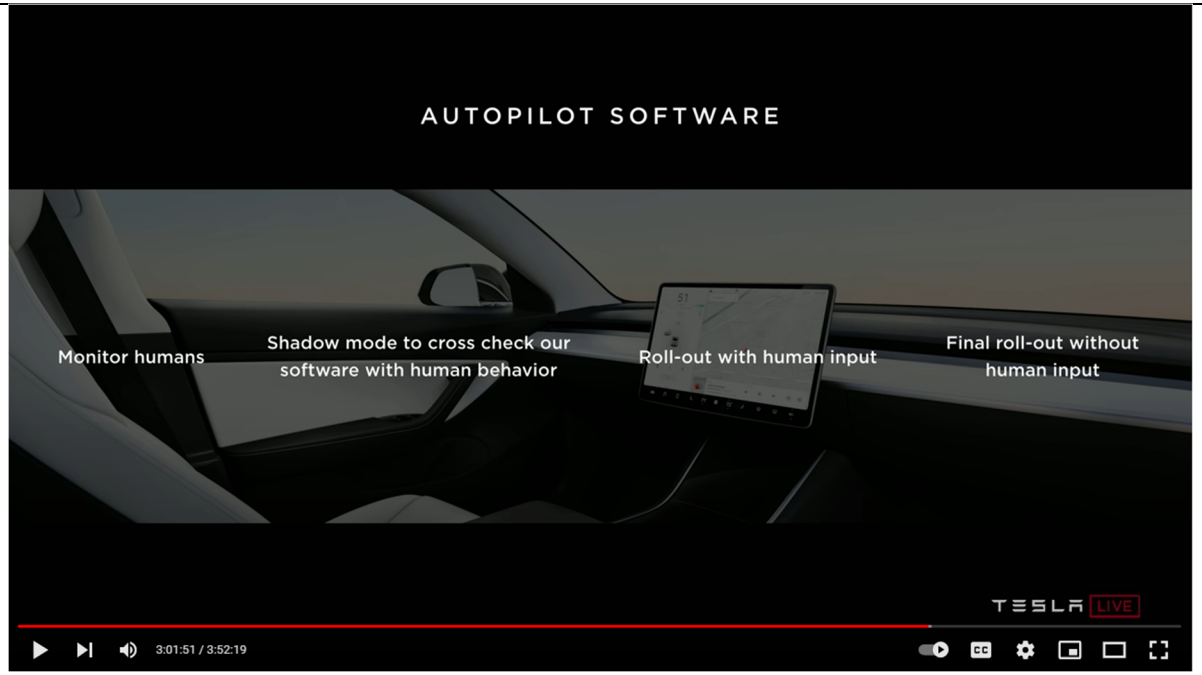
1. A camera is mounted above the rear license plate.
2. Ultrasonic sensors (if equipped) are located in the front and rear bumpers.
3. A camera is mounted in each door pillar.
4. Three cameras are mounted to the windshield above the rear view mirror.
5. A camera is mounted to each front fender.
6. Radar (if equipped) is mounted behind the front bumper.

Model Y is also equipped with high precision electronically-assisted braking and steering systems.

See https://www.tesla.com/ownersmanual/modely/en_us/GUID-EDA77281-42DC-4618-98A9-CC62378E0EC2.html

[1c] receiving or generating a first one or more instruction sets for operating the first device; and	Each autonomous Tesla vehicle is an example of a system including one or more processors can receiv[e] or generat[e] a first one or more instruction sets for operating the first device. For example, as the driver drives the first Tesla vehicle **(the claimed "first device")**, the processor of the first Tesla vehicle receives a set of driving instructions (i.e. driving instructions for effecting speed, steering, breaking, trajectory, etc.; **the claimed "first one or more instruction sets"**) that the driver used to navigate the vehicle's surrounding.  *See* Tesla Autonomy Day 2019 video https://www.youtube.com/watch?v=-b041NXGPZ8 at 1:04:10 ("While you are driving a car [**the claimed "first device"**] what you're actually doing is you are annotating the data because you are steering the wheel. You're telling us how to traverse different environments so what we're looking at here is some person in the fleet who took a left through an intersection and what we do here is we have the full video of all the cameras and we know that the path that this person took because of the GPS, the inertial measurement unit, the wheel angle, the wheel ticks, so we put all that together and we understand the path that this person took through this environment **[the claimed receiving of**

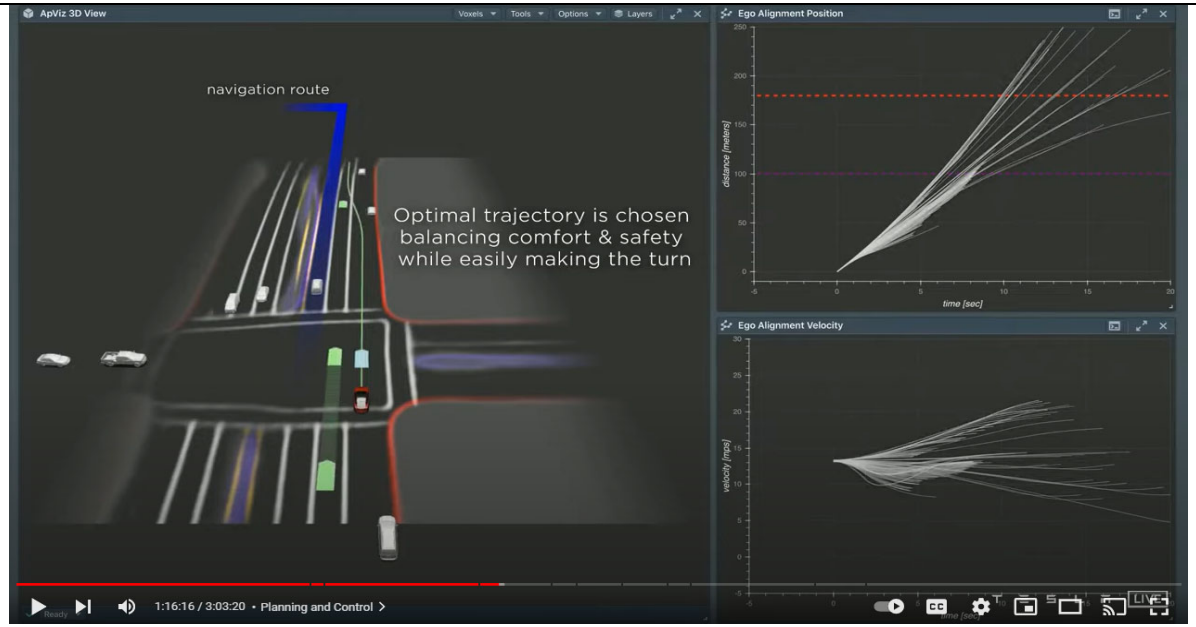
	instructions]. And then of course we can use this for supervision for the network so we just source a lot of this from the fleet, we train a neural network on those trajectories, and then the neural network predicts paths just from that data. … we're taking human trajectories from the real world we're just trying to imitate how people drive in real worlds.") *See also* Tesla AI Day 2021 video https://www.youtube.com/watch?v=j0z4FweCy4M at 2:55:29 (all the human drivers are essentially training the neural net as to what is the correct course of action **[the claimed driving instructions]**)
[1d] learning the first one or more digital pictures correlated with the first one or more instruction sets for operating the first device.	Each autonomous Tesla vehicle is an example of a system including one or more processors can learn[] the first one or more digital pictures correlated with the first one or more instruction sets for operating the first device. For example, as the driver drives the first Tesla vehicle **(the claimed "first device")**, the processor of the first Tesla vehicle learns (including storing what is learned in memory) the first one or more digital pictures depicting the vehicle's surrounding (i.e. pedestrian in front the vehicle, surrounding vehicles in a lane change situation, intersection in a left turn situation, etc.) and a set of driving instructions (i.e. instructions for applying the brakes so the pedestrian is not hit, instructions for turning the wheel to safely change lanes, instructions for turning left in an intersection, etc.) that the driver used to navigate the vehicle's surrounding **(the claimed "learning the first one or more digital pictures correlated with the first one or more instruction sets for operating the first device")**.



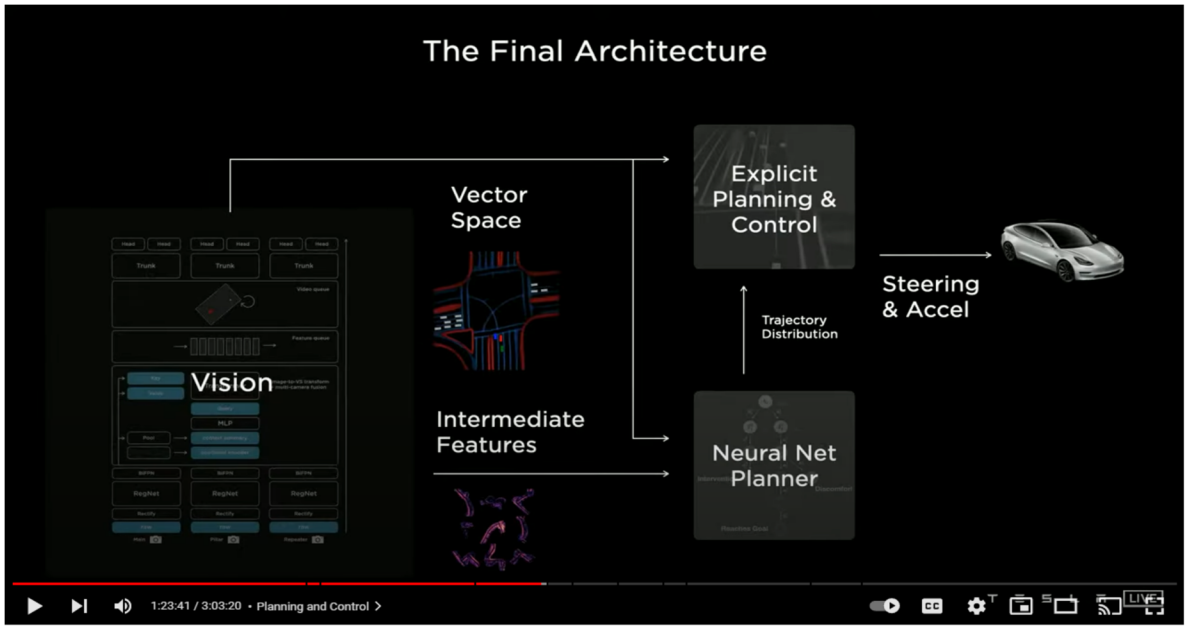
See Tesla Autonomy Day 2019 video https://www.youtube.com/watch?v=-b041NXGPZ8 at 1:03:50 (Musk: "Everyone is training the network all the time"), 1:30:55; 1:52:23.

	 See Tesla Autonomy Day 2019 video https://www.youtube.com/watch?v=-b041NXGPZ8 at 1:04:10 ("While you are driving a car **[the claimed "first device"]** what you're actually doing is you are annotating the data because you are steering the wheel **[the claimed "learning the first one or more digital pictures correlated with the first one or more instruction sets for operating the first device"]** you're telling us how to traverse different environments so what we're looking at here is some person in the fleet who took a left through an intersection and what we do here is we have the full video of all the cameras and we know that the path that this person took because of the GPS, the inertial measurement unit, the wheel angle, the wheel ticks, so we put all that together and we understand the path that this person took through this environment. And then of course we can use this for supervision for the network so we just source a lot of this from the fleet, we train a neural network on those trajectories, and then the neural network predicts paths just from that data. … we're taking human trajectories from the real world we're just trying to imitate how people drive in real worlds").
[4pre] the system of claim 1, wherein the machine readable	Each autonomous Tesla vehicle is an example of a system that includes a processor, memory, etc. Tesla fleet includes over a million of such customer vehicles. A fleet of Tesla vehicles is also an example of a covered system.

code, when executed by the one or more processors, causes the one or more processors to further perform at least:	The discussion and evidence cited in claims [1a-d] and [4a-c] are incorporated herein
[4a] receiving or generating a new one or more digital pictures;	Each autonomous Tesla vehicle is an example of a system including processors that can receive or generate a new one or more digital pictures. For example, the processor of the second Tesla vehicle **(the claimed "second device")** receives from the vehicle's cameras the **new one or more digital pictures** depicting the vehicle's current surrounding (i.e. pedestrians, other vehicles, roads, buildings, etc.). The discussion and evidence cited in claims [1b] is incorporated herein.
[4b] determining the first one or more instruction sets for operating the first device based on at least partial match between the new one or more digital pictures and the first one or more digital pictures; and	Each autonomous Tesla vehicle is an example of a system including processors that can determine the first one or more instruction sets for operating the first device based on at least partial match between the new one or more digital pictures and the first one or more digital pictures. For example, the processor of the second Tesla vehicle **(the claimed "second device")** determines a set of driving instructions (i.e. instructions for applying the breaks so the pedestrian is not hit, instructions for turning the wheel to safely change lanes, instructions for turning left in an intersection, etc.; **the claimed "first one or more instruction sets"**) based on similarity **(the claimed "at least partial match")** between the **first one or more digital pictures** depicting the first vehicle's surrounding (i.e. pedestrian in front the vehicle, surrounding vehicles in a lane change situation, intersection in a left turn situation, etc. as previously learned on the first Tesla vehicle) and the **new one or more digital pictures** depicting the second vehicle's surrounding (i.e. different pedestrian in front the vehicle, different surrounding vehicles in a lane change situation, different intersection in a left turn situation, etc. as currently captured by the cameras of the second Tesla vehicle). Therefore, Tesla vehicles determine previously learned driving instructions based on similarity between the currently received digital pictures and previously learned digital pictures.

	 See Tesla AI Day 2021 video https://www.youtube.com/watch?v=j0z4FweCy4M at 1:15:26 ("Let's see an example of how the search **[i.e. search for previously learned driving instructions for effecting a trajectory correlated with previously learned digital pictures that at least partially match the incoming digital pictures]** operates. So here we're trying to do a lane change. In this case the car needs to do two back to back lane changes to make the left turn up ahead. For this, the car searches over different maneuvers. So the first one it searches is a lane change that's close by but the car breaks pretty harshly so it's pretty uncomfortable. The next maneuver it tries does the lane change a bit late so it speeds up, goes beyond the other car, goes in front of the other cars, and find it at the lane change but now it risks missing the left turn. We do thousands of such searches in a very short time span."). *See also id.* at 2:32:42 ("Similarly, for planning, we need to bake in a search **[i.e. search for previously learned driving instructions for effecting a trajectory correlated with previously learned digital pictures that at least partially match the incoming digital pictures]** and optimization into the planning, into the network architecture, and once we do that we should be able to do planning very quickly").
[4c] at least in	Each autonomous Tesla vehicle is an example of a system including processors that can at least in response

response to the determining, causing the first device or a second device to perform one or more operations defined by the first one or more instruction sets for operating the first device.	to the previous determining, cause the first device or a second device to perform one or more operations defined by the first one or more instruction sets for operating the first device. For example, the processor of the second Tesla vehicle **(the claimed "second device")** executes, at least in response to the determining (claim element 4b), the previously learned set of driving instructions for operating the first Tesla vehicle **(the claimed "first one or more instruction sets for operating the first device")** so that the second vehicle **(the claimed "second device")** can drive autonomously based on the driving instructions learned on the first Tesla vehicle **(the claimed "first device")**. Further, memory of the second Tesla vehicle stores the **first one or more digital pictures** depicting the first vehicle's surrounding (i.e. pedestrian in front the vehicle, surrounding vehicles in a lane change situation, intersection in a left turn situation, etc.) correlated with a set of driving instructions (i.e. instructions for applying the brakes so the pedestrian is not hit, instructions for turning the wheel to safely change lanes, instructions for turning left in an intersection, etc.; **the claimed "first one or more instruction sets"**) that have previously been learned on the first Tesla vehicle **(the claimed "first device")** and have been transferred to the second Tesla vehicle **(the claimed "second device")** via the fleet over-the-air (OTA) software update. In response to determining that the incoming **new one or more digital pictures** are similar to **(the claimed "at least partial match")** the previously learned **first one or more digital pictures**, the processor of the second Tesla vehicle causes the previously learned driving instruction (i.e. instructions for applying the brakes so the pedestrian is not hit, instructions for turning the wheel to safely change lanes, instructions for turning left in an intersection, etc.; **the claimed "first one or more instruction sets"**) to be executed to cause the second Tesla vehicle **(the claimed "second device")** to perform autonomous driving. As stated by Mr. Musk on Tesla Autonomy Day 2019, Tesla system distributes driving knowledge learned from multiple Tesla vehicles to all Tesla vehicles via over-the-air (OTA) software updates, thereby enabling the second Tesla vehicle **(the claimed "second device")** to autonomously implement driving knowledge learned on the first vehicle **(the claimed "first device")** as claimed. Mr. Musk and Mr. Karpathy describe this as a crucial competitive advantage of Tesla over other autonomous driving companies. *See* Tesla Autonomy Day 2019 video https://www.youtube.com/watch?v=-b041NXGPZ8 at 38:58 (Musk: "I think a very powerful sustainable advantage for us is the fleet"), 44:40 (Karpathy: "it is such a big deal that we have the fleet. . . why it [the fleet] is a key enabling factor"), 55:55 (Karpathy: "why is Tesla in such a unique and interesting position to really get all these three essentials right, and the answer

	to that of course is the fleet"), 122:14 (Musk: "it's extremely difficult to catch up when Tesla has 100 times more miles per day than everyone else combined").  *See* Tesla AI Day 2021 video https://www.youtube.com/watch?v=j0z4FweCy4M at 1:23:40 ("So this is what a final architecture is going to look like. The vision system is going to crush down the dense video data into a vector space **[incoming digital pictures depicting the second Tesla vehicle's surrounding]**. It's going to be consumed by both an explicit planner and a neural network planner **[CNN that stores previously learned digital pictures correlated with previously learned driving instructions and that searches for at least partially matching digital pictures and correlated driving instructions]**. In addition to this, the network planner can also consume intermediate features of the network. Together, this produces a trajectory distribution and it can be optimized end to end both with explicit cost functions and human intervention and other imitation data. this then goes into explicit planning function that does whatever it sees for that and produces the final steering and acceleration commands for the car").